



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
PO Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/761,100	01/16/2001	Philip H. Thompson	01827.0013.00US00	3670

29315 7590 05/20/2003

MINTZ LEVIN COHN FERRIS GLOVSKY AND POPEO PC  
12010 SUNSET HILLS ROAD  
SUITE 900  
RESTON, VA 20190

EXAMINER

MOTTOLA, STEVEN J

ART UNIT	PAPER NUMBER
----------	--------------

2817

DATE MAILED: 05/20/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

761100

Applicant(s)

Thompson

Examiner

Mottola

Group Art Unit

2817

—The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address—

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

## Status

- ☒ Responsive to communication(s) filed on December 4, 2002.
- ☒ This action is **FINAL**.
- ☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

## Disposition of Claims

- ☒ Claim(s) 1-3, 8-10, 17-19 is/are pending in the application.
- ☐ Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- ☒ Claim(s) 1-3, 8, 10, 18, 19 is/are rejected.
- ☒ Claim(s) 9, 17 is/are objected to.
- ☐ Claim(s) \_\_\_\_\_ are subject to restriction or election requirement.

## Application Papers

- ☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.
- ☒ The proposed drawing correction, filed on 12-4-02 is ☐ approved ☒ disapproved.
- ☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.
- ☐ The specification is objected to by the Examiner.
- ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119 (a)-(d)

- ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
  - ☐ All ☐ Some\* ☐ None of the CERTIFIED copies of the priority documents have been received.
  - ☐ received in Application No. (Series Code/Serial Number) \_\_\_\_\_.
  - ☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\*Certified copies not received: \_\_\_\_\_

## Attachment(s)

- ☒ Information Disclosure Statement(s), PTO-1449, Paper No(s). 8
- ☐ Notice of Reference(s) Cited, PTO-892
- ☐ Notice of Draftsperson's Patent Drawing Review, PTO-948
- ☐ Interview Summary, PTO-413
- ☐ Notice of Informal Patent Application, PTO-152
- ☐ Other \_\_\_\_\_

Office Action Summary

Art Unit: 2817

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the FET embodiment of claim 3 and the integrated circuit of claims 17 and 19 must be shown or the feature(s) canceled from the claim(s).
2. The proposed drawing correction and/or the proposed substitute sheets of drawings, filed on December 4, 2002 have been disapproved, since the proposed generic transistor box is less descriptive of the claimed subject matter, especially w.r.t. claim 2. Further, the box has only two terminals as opposed to the three terminals of a transistor. Regarding the integrated circuit, this type of construction is argued by the applicant as establishing patentability over the prior art (remarks, page 5) and would thus appear to be a critical aspect of the invention. A proper drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The correction to the drawings will not be held in abeyance.
3. The "Supplemental Information Disclosure Statement" filed October 9, 2002 has been noted but the shipment of chips referenced in the statement made is not considered to be 'prior art' as defined in MPEP 609. Thus the citation on the form 1449 attached herewith has been lined through and will not print on any patent that may issue from the present application.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in-

Art Unit:

- (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effect under this subsection of a national application published under section 122(b) only if the international application designating the United States was published under Article 21(2)(a) of such treaty in the English language; or
- (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that a patent shall not be deemed filed in the United States for the purposes of this subsection based on the filing of an international application filed under the treaty defined in section 351(a).

Claim 19 is are rejected under 35 U.S.C. 102(e) as being anticipated by Stengel et al.

Refer to fig. 1 of Stengel et al. described beginning at line 61 of col. 2 of their disclosure.

A splitter 106 divides the input signal into paths 108,110 and may be read as the input splitter claimed. One path includes a 90 degree phase shifter 114 that may be read as the claimed phase shifter. Carrier and peaking amplifiers 112,116 may be read as the like elements claimed. They include FET devices . Their outputs are combined in combiner 130 including a quarter wave element 136, which may be read as the quater wave transformer/combiner claimed, there being inherently a 90 degree phase shift between the ends. In regard to the preamble of the claim, figs. 3-4 show the integrated construction of the device of Stengel et al.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-3,10, and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over either Mitzlaff.

Art Unit:

Refer first to fig. 2 of Mitzlaff. A quadrature splitter 203 divides an input signal into paths 90 degrees out of phase and is functionally equivalent to the claimed splitter and phase shifter arrangement of claims 1 and 10. Carrier and peaking amplifiers 205,207 may be read as the like elements claimed in claims 1 and 10. Combiner 215 includes a quarter wave transmission line 217 so that the amplifier outputs are combined in phase. Thus the combiner 215 may be read as the quarter wave transformer/combiner of claims 1 and 10. Thus the only difference between the independent claims and Mitzlaff is that the input splitter and phase shifter functions are combined into one quadrature splitter in Mitzlaff as opposed to being separate components as claimed. However, as noted above the arrangements are functionally equivalent because in either case the input signal is split and one side is phase shifted by 90 degrees. There would be no difference in the signals applied to the amplifiers. In regard to claims 3 and 18, Mitzlaff discloses the use of FETs for the amplifier elements (see fig. 6 and the last paragraph of col. 5). In regard to claim 2, it would have been obvious to substitute bipolar transistors because the applicant claims bipolars and FETs interchangeably, and both are well known types of transistors widely substituted for one another. Regarding the applicant's argument against the rejection, there is no integrated circuit limitation claimed.

Claims 9 and 17 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Art Unit:

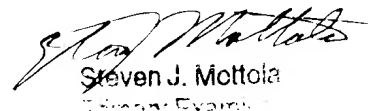
It is not disclosed in the prior art of record that the quarter wave combiner would decrease the load impedance of the carrier amplifier as power increased(claim 9), nor is an integrated quarter wave combiner directly coupled to the outputs of carrier and peaking amplifiers disclosed (claim 17).

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mr. Mottola whose telephone number is 703-308-4914. The examiner can normally be reached on M-Th from 8 to 5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Pascal, can be reached on (703) 308-4909. Any general or status inquiry of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.

  
Steven J. Mottola  
Examiner